

REMARKS

Final Office Action Improper

Office Action dated January 17, 2002, indicated that the Office Action was "Final." The designation as final, however, is improper because the Office Action introduced a new ground of rejection that was neither necessitated by Applicants' amendment of the rejected claims, nor based on information submitted in an information disclosure statement (IDS).

Specifically, MPEP § 706.07(a) states:

Under present practice, second or any subsequent actions on the merits shall be final, *except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims* nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p).

(Emphasis added.)

The Office Action included a rejection of claims 1, 2, and 5 under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent No. 5,563,465 to Nakahara et al. (hereinafter the "Nakahara patent"), and a rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 53-82286 (A) to Takekida (hereinafter the "Takekida publication") in view of the Nakahara patent. Neither of these rejections were included in the previous Office Action, dated May 16, 2001. Therefore, the current Office Action introduced a new ground of rejection, and, in order for the Office Action to be final, the new ground of rejection must be either necessitated by Applicants' amendment of claims or based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c).

The new ground of rejection was not necessitated by Applicants' amendment. In an amendment filed November 14, 2001, Applicants amended claims 1, 2, and 5 to improve the grammar thereof only. Therefore, the amendments to claims 1, 2, and 5 could

not have necessitated a new ground of rejection. For the convenience of examination, the amendment of claims 1, 2, and 5 as filed in the November 14, 2001 amendment are duplicated below.

1. (Once Amended) An actuator comprising:
a plurality of displacing devices for generating displacements;
a compound [member] member, connected to the displacing
[devices and] devices, for compounding displacements of the displacing
devices;
a base member for [folding] holding base ends of the displacing
devices to [at] which the compound member is not connected;
a pressing member for pressing the compound member to an object
to be driven; and
a driver for resonantly driving the displacing devices so as to move
the compound member along an elliptic or a circular trail.

2. (Once Amended) [The] An actuator in accordance with
claim 1, wherein a natural frequency of the displacing devices in a first
natural vibration [mode] mode, in which the displacing devices are
resonantly vibrated in the same [phase] phase, substantially coincides with
a natural frequency of the displacing devices in a second natural vibration
[mode] mode, in which the displacing devices are resonantly vibrated in
the opposite phase.

5. (Once Amended) [The] An actuator in accordance with
claim 1, wherein at least one of the plurality of displacing [device] devices
includes an elastic member as a part thereof.

Furthermore, the rejection of claims 1, 2, and 5 is not based on information
submitted by Applicants in an IDS filed during the period set forth in 37 CFR 1.97(c).

Accordingly, the designation of the Office Action as final is improper, and,
therefore, Applicants respectfully request that the designation of the Office Action dated
January 17, 2002 as final be removed.

Status Of Application

Claims 1-9 and 11-17 are pending in the application; the status of the claims is as
follows:

Claims 6-9 and 11-17 are allowed.

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 2, and 5 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by U.S. Patent No. 5,563,465 to Nakahara et al. (hereinafter the "Nakahara patent").

Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 53-82286 (A) to Takekida (hereinafter the "Takekida publication") in view of the Nakahara patent.

Drawings

To date, no Notice of Draftsperson's Patent Drawing Review has been received. Applicants respectfully request receipt of this document when it becomes available.

Information Disclosure Statement

To date, no acknowledgement of the Supplemental Information Disclosure Statement, dated November 14, 2001, has been received. Applicants respectfully request receipt of this document when it becomes available.

Allowable Subject Matter

The allowance by the Examiner of claims 6-9 and 11-17 is noted with appreciation.

The objection to claims 3 and 4 as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is noted with appreciation.

By this Amendment, claim 1, from which claims 3 and 4 depend, has been amended and is considered to be in condition for allowance for the reasons stated below.

Therefore, rewriting claims 3 and 4 in independent form would involve unnecessary expense and effort.

Accordingly, it is respectfully requested that the objection to claims 3 and 4 as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, be reconsidered and withdrawn.

35 U.S.C. § 102(b) Rejection

The rejection of claims 1, 2, and 5 under 35 U.S.C. § 102(b) as being clearly anticipated by the Nakahara patent, is respectfully traversed based on the following.

Rejected independent claim 1 has been amended to more particularly recite at least one of the distinguishing characteristics of the present invention, namely, that *the driver resonantly driving the displacing devices causes only the displacing devices and the compound member to substantially vibrate*. Support for this amendment exists in the Application, and therefore, no new matter has been added.

The Nakahara patent has been cited as fully disclosing Applicants' invention. The Nakahara patent, however, fails to disclose or suggest *a driver that drives the displacing devices such that only the displacing devices and the compound member substantially vibrate*, as recited in Applicants' claim 1.

The Nakahara patent assertedly discloses that voltages having a phase difference of 90 degrees are applied to piezoelectric devices 1 and 2. As a result, the drive head 3 may be moved in an elliptical orbit. (Fig. 2, col. 1, lines 14-30.) In contrast to Applicants' invention, however, Nakahara fails to disclose or suggest that only the displacing devices and the compound member substantially vibrate. Since Nakahara fails to disclose or suggest all of the limitations of Applicants' claim 1, Nakahara cannot anticipate Applicants' claim 1.

In regards to claim 2, the rejection asserted that claim 2 provided no further structural limitation to the structure of claim 1. In response, Applicants have amended claim 2 to more clearly recite one of the distinguishing features of Applicants' invention, namely, that *the displacing devices have* a first natural frequency in a first natural vibration mode that substantially coincides with a second natural frequency in a second natural vibration mode. Therefore, claim 2 recites a patentable limitation to the structure of claim 1, and Applicants respectfully request that the rejection of claim 2 as not providing any further structural limitations to claim 1 be reconsidered and withdrawn.

Claims 2 and 5 depend from and further limit independent claim 1 in a patentable sense and, therefore, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, and 5 under 35 U.S.C. § 102(b) as being anticipated by the Nakahara patent, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

The rejection of claim 1 under 35 U.S.C. § 103(a), as being unpatentable over the Takekida publication in view of the Nakahara patent, is respectfully traversed based on the following.

As noted above, claim 1 has been amended to more particularly recite at least one of the distinguishing characteristics of the present invention, namely, that *the driver resonantly driving the displacing devices causes only the displacing devices and the compound member to substantially vibrate*.

The Takekida publication has been cited as fully disclosing Applicants' invention except for showing a pressing member for pressing the compound member to an object to be driven, for which the Nakahara patent has been cited. The cited references, however, neither teach nor suggest that *the driver resonantly driving the displacing devices causes only the displacing devices and the compound member to substantially vibrate*.

The Takekida publication is directed towards a motor, which includes piezoelectric elements, a rotor, and a hook mechanism, in which the piezoelectric elements are used as a mechanism for transducing electric power to driving force. The Takekida publication assertedly discloses that AC voltages which are displaced by a certain phase difference are used for driving the piezoelectric elements. The Takekida publication, however, is silent with regard to the vibration of the individual elements.

Furthermore, as discussed above with reference to the 102 rejections, the Nakahara patent is also silent with regard to the vibration of the individual elements. Therefore, since the combination of the Takekida publication and the Nakahara patent fails to disclose or suggest all of the limitations of Applicants' claim 1, the combination cannot render obvious Applicants' claim 1.

Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over the Takekida publication in view of the Nakahara patent, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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May 9, 2002

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following is a marked-up version of the changes to the claims which are being made in the attached response to the Office Action dated January 17, 2002.

IN THE CLAIMS:

1. (Twice Amended) An actuator comprising:
 - a plurality of displacing devices for generating displacements;
 - a compound member, connected to the displacing devices, for compounding displacements of the displacing devices;
 - a base member for holding base ends of the displacing devices to which the compound member is not connected;
 - a pressing member for pressing the compound member to an object to be driven;
 - and
 - a driver for resonantly driving the displacing devices so as to move the compound member along an elliptic or a circular trail;

wherein the driver resonantly driving the displacing devices causes only the displacing devices and the compound member to substantially vibrate.

2. (Twice Amended) An actuator in accordance with claim 1, wherein the displacing devices have a first natural frequency [of the displacing devices] in a first natural vibration mode, in which the displacing devices are resonantly vibrated in the same phase, that substantially coincides with a second natural frequency [of the displacing devices] in a second natural vibration mode, in which the displacing devices are resonantly vibrated in the opposite phase.